

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Patent Claims

1-22 (canceled)

23. (new) A device for cleaning a thick matter delivery pipe (10) having
an end-hose (18), the end-hose (18) including a jacket pipe of elastomeric material,
a cleaning body (20) which with a full circumference lies against the inner surface of the thick matter delivery pipe (10),
a device (24) for introduction of a fluid under pressure into the thick matter delivery pipe (10) for acting on the cleaning body (22) and transporting the cleaning body through the delivery pipe,
a closure device (30) for the at least partial closure of the end-hose (18), and
a sensor (26) determining the consistency of the material situated in a section of the thick matter delivery pipe (10) and for transmitting a signal characterizing a change in consistency to a control unit (28) for actuation of the a closure device (30),
wherein the a closure device (30) is a squeeze valve for narrowing the internal width of or for closing the end-hose (18).
24. (new) The device according to claim 23, wherein said elastomeric material is rubber.
25. (new) The device according to claim 23, wherein the fluid is air and wherein the device (24) for introduction of the fluid is a compressor for producing compressed air.
26. (new) The device according to claim 23, wherein the fluid is water and wherein the device (24) for introduction of the fluid is a water pump.

27. (new) The device according to claim 23, wherein a slide valve (20) is provided on the inlet side of the thick matter delivery pipe (10) for introduction or insertion of the cleaning body (22).
28. (new) The device according to claim 23, wherein the sensor (26) is calibrated for recognition of least two different material consistencies.
29. (new) The device according to claim 23, wherein the sensor (26) is a ultrasound sensor emitting ultrasound into the thick matter delivery pipe (10).
30. (new) The device according to claim 23, wherein the cleaning body (22) is comprised of a compressible material.
31. (new) A process for cleaning a thick matter delivery pipe (10) with an end-hose (18) provided on the outlet side, the end-hose (18) including a jacket pipe of elastomeric material, said method comprising
- introducing fluid under pressure into the thick matter delivery pipe (10) to convey a cleaning body (22) through the pipe under the influence of the fluid, wherein the cleaning body is fully circumferentially in contact with the inner diameter of the thick matter delivery pipe (10),
- determining the consistency of the material located in a section of the thick matter delivery pipe (10) via a sensor (26),
- wherein a change in the consistency of the material causes the sensor (26) to transmit a signal to the control unit (28), and
- wherein the control unit (28) actuates a closure device (30) upon receiving this signal, as a result of which actuation the end-hose (18) is narrowed or the end-hose (18) is closed.
32. (new) The process according to claim 31, wherein the fluid is compressed air, which is introduced into the thick matter delivery pipe (10) via a compressor.

33. (new) The process according to claim 31, wherein the fluid is water, which is introduced into a thick matter delivery pipe (10) via a water pump.
34. (new) The process according to claim 31, wherein the cleaning body (22) is introduced via a slide valve (20) provided at the inlet side of the thick matter delivery pipe (10).
35. (new) The process according to claim 32, wherein the sensor (26) recognizes at least two different predetermined material consistencies.
36. (new) The process according to claim 31, wherein the sensor (26) impinges the thick matter delivery line (10) with ultrasound and determines the material consistency by evaluation of the reflected ultrasound.
37. (new) A squeeze valve insertable upon an end-hose (18) of a thick matter delivery line (10) having an end-hose (18), the end-hose (18) including a jacket pipe of elastomeric material, the squeeze valve adapted for the at least partial closure of the end-hose (18) by narrowing the internal width of or for closing the end-hose (18) upon detection of a change in consistency of the material situated in a section of the thick matter delivery pipe (10), wherein said squeeze valve includes a hose (34) of an elastomeric material enclosing a ring-shaped hollow space (36), which hose (34) includes an inlet and outlet opening (40) for filling and emptying the hollow space (36) with a gas under pressure, and a ring-shaped jacket (44) receiving the hose (34) on its inside, which jacket prevents expansion of the hose in the radially outwards direction.
38. (new) The squeeze valve according to claim 37, wherein the hose (34) is covered on its outer side, opposite the hollow space (36), with a textile fabric layer (38).
39. (new) The squeeze valve according to claim 37, wherein the hose (34) is embedded in a sleeve (32) of elastomeric material.

40. (new) The squeeze valve according to claim 39, wherein the sleeve (32) surrounds the jacket (44).
41. (new) The squeeze valve according to claim 39, wherein the sleeve (32) has the shape of a hollow cylinder and that its inner diameter is at least as large as the outer diameter of the pipeline.
42. (new) The squeeze valve according to claim 37, wherein the jacket (44) is comprised of a preferably multi-layer textile or fabric.
43. (new) The squeeze valve according to claim 37, wherein a valve (42) is provided in the inlet and outlet opening (40).
44. (new) A squeeze valve insertable upon an end-hose (18) of a thick matter delivery line (10), said squeeze valve including
 - a hose (34) of an elastomeric material enclosing a ring-shaped hollow space (36), said hose (34) including an inlet and outlet opening (40) for filling and emptying the hollow space (36) with a gas under pressure, and
 - a ring-shaped jacket (44) receiving the hose (34) on its inside, which jacket prevents expansion of the hose in the radially outwards direction.
45. (new) The squeeze valve according to claim 44, wherein the hose (34) is covered on its outer side, opposite the hollow space (36), with a fabric layer (38).
46. (new) The squeeze valve according to claim 44, wherein the hose (34) is embedded in a sleeve (32) of elastomeric material.
47. (new) The squeeze valve according to claim 44, wherein the sleeve (32) surrounds the jacket (44).

48. (new) The squeeze valve according to claim 44, wherein the sleeve (32) has the shape of a hollow cylinder and that its inner diameter is at least as large as the outer diameter of the pipeline.
49. (new) The squeeze valve according to claim 44, wherein the jacket (44) is comprised of a preferably multi-layer textile or fabric.
50. (new) The squeeze valve according to claim 44, wherein a valve (42) is provided in the inlet and outlet opening (40).